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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,016	03/10/2004	Francois Le Bourhis	06028.0045-00	2658

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EXAMINER

SOROUGH, ALI

ART UNIT	PAPER NUMBER
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1616

MAIL DATE	DELIVERY MODE
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04/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/796,016	Applicant(s) LE BOURHIS ET AL.	
	Examiner ALI SOROUGH	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-9 and 11-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-9, and 11-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/09/2009 has been entered.

Status of the Claims

Claims 2, 3, and 10 are cancelled and claim 4 is currently amended. Therefore, claims 1, 4-9, and 11-32 are currently pending examination for patentability.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue; and resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. The rejection claims 1-28 and 30-32 under 35 U.S.C. 103(a) as being unpatentable over Sturla et al (US Patent Application 2001/0051135 A1, Published 12/13/2001) in view of Ashton et al (US Patent 6350433 B1, Published 02/26/2002) **is maintained.**

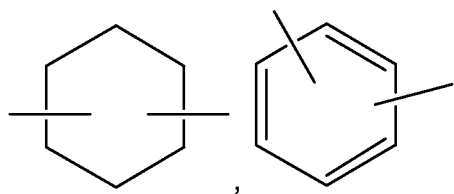
Applicant Claims

Applicant claims a aerosol device comprising a cosmetic composition comprising a polyurethane in a cosmetically acceptable medium comprising water and an organic solvent and a propellant comprising dimethyl ether and at least one C₃- C₅ hydrocarbons. Applicant further claims a method for shaping and/or holding a hairstyle and a hair lacquer using the aforementioned aerosol device.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

Sturla et al. teaches aerosol device comprising a polyurethane and/or polyurea multiblock polymer in cosmetically acceptable medium. (abstract). "The polyurethane and/or polyurea compounds of the polymer can having repeating base unit corresponding to the general formula (I): -X-B-X-CO-NH-R-NH-CO- in which: X represents O and/or NH, B is a divalent ... radical chosen from aromatic alkylene radicals, and C₁ to C₂₀ aliphatic radicals, and C₁ to C₂₀ cycloaliphatic radicals. In certain embodiments, radical B is a C₁ to C₃₀ radicals ..." (See paragraph 0031 – 0036). "The radical R can be chosen from the radicals corresponding to the following formulae:

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...” (See paragraph 0037). “In certain embodiments,

radical R is chosen from hexamethylene, 4,4'-biphenylenemethane, 2,4- and/or 2,6-

tolylene, 1,5-naphthylene, p-phenylene and methylene-4,4-bis-cyclohexyl radicals, and

the divalent radicals derived from isophorone.” (See paragraph 0039). In accordance

with the invention a polyurethane and/or polyurea comprising a polysiloxane for

example “the formula (II): X-P-X-CO-NH-R-NH-CO- in which: P is a polysiloxane

segment, X represents O and NH, and C₁ to C₂₀ aliphatic radicals, and C₁ to C₂₀

cycloaliphatic radicals. In certain embodiments, radical B is a C₁ to C₃₀ radicals ...” (See

paragraph 0040 and 0041). Sturla et al. teaches that polyurethane can be added to the

total weight of the composition in an amount between 0.1 and 20%, preferably between

2 and 8%. (See paragraph 0062). The amount of organic solvent (i.e. ethanol) can be

added in amount between 7.5 to 70% by weight. (See paragraphs 0063 and 0064). The

total amount of propellant added to the composition can be between 15 and 85%,

preferably between 25 and 60%, and most preferably between 30 and 50%. (See

paragraph 0065). The propellant can comprise fluoro or non-fluoro hydrocarbons,

dimethyl ether and mixtures thereof. (See paragraph 0066). The composition can further

include cosmetic additives including thickeners, antiperspirants, surfactants, and

vitamins. (See paragraph 0067). A preferred example of the device containing the

following composition: 4% lactic acid/ethylene glycol P (MIS-EG) dimethylolpropanoic

acid (DMPA) –isophorone diisocyanate polyester, aminomethylpropanol, 15% ethanol,

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35% dimethyl ether, q.s. 100% demineralized water. (See paragraph 0071). Sturla et al. further teaches a process for shaping or maintaining a hairstyle comprising using the use of this aerosol device. (See paragraph 0011). "Yet another subject the invention relates to the use of this device for the manufacture of a lacquer or an aerosol spray." (See paragraph 0012).

***Ascertainment of the Difference Between Scope the Prior Art and the Claims
(MPEP §2141.012)***

Sturla et al. lacks a teaching of a propellant comprising both dimethyl ether and at least one C₃- C₅ hydrocarbons. Ashton et al. cure the deficiency.

Ashton et al. teaches an autophobic hair spray composition comprising film forming resin such as carboxylated polyurethanes, propellant, and autophobic hair spray additive. (See title and column 2, Lines 64-65). "The hairspray resin employed in the composition of the present invention should be capable of forming a film and holding the hair of the user in place ..." (See column 2, Lines 15-17). "Compositions of the present invention include water. Typical water levels for an ethanol-based aerosol fixing spray are from 2 to 10%, usually about 2 to 6% by weight." (See column 6, Lines 30-32). The composition can further include an adjuvant such as ceramides. (See column 7, Lines 21-39). Ashton et al. further teaches that propellant is a mixed propellant of dimethyl ether and hydrocarbone selected from isobutane, n-butane, propane, and mixtures. (See column 3, Lines 64-67 and column 4, Lines 1-2). "The amount of propellant will range 3 to 50%, preferably from 5 to 45%, optimally from 25 to 45% by weight total composition. Weight ration of total hydrocarbon to dialkyl ether will range

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from 5:1 to 1:10, preferably from 2:1 to 1:5, more preferably from 1:1 to 1:4, optimally about 1:2 by weight.” (See column 4, Lines 9-11).

***Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)***

It would have been obvious to one of ordinary skill in the art to combine Sturla et al. with Ashton et al. One would have been motivated to do because Sturla et al. teaches that a mixture of propellants may be used for delivering a polyurethane composition. Further, Ashton et al. teaches a composition that comprises carboxylated polyurethanes for hair fixing. For the foregoing reasons the instant device would have been obvious to one of ordinary skill in the art at the time of the instant invention.

Response to Applicant's Arguments

Applicant argues that Sturla et al. alone does not provide motivation to use a binary propellant system such as the one instantly claimed. Further, Applicant argues that the combination of Sturla et al. with Ashton et al. provides no guidance as to using the instantly claimed binary propellant system. Applicant's arguments have been fully considered but found not to be persuasive. Ashton et al. teach that a binary propellant system comprising dimethyl ether and a propellant selected from propane, isobutane, and n-butane makes possible the achievement of both an autophobic effect and a single phase system hairspray with a film-forming hairspray resin. Since Sturla et al. teach that combination propellants can also be successfully used, one of ordinary skill in the art would expect that using the propellant binary system taught by Ashton et al. would work equally well in giving an autophobic effect and a single phase system hairspray.

With regard to Applicant's declaration of unexpected results, that the instantly claimed composition comprising a binary propellant results sound level lower than the composition of a single propellant system taught by Sturla et al. Applicants declaration has been fully considered but found not to be persuasive. The instantly claimed binary propellant system is taught by Ashton et al. and it is Examiners position that the binary propellant system inherently has the same sound level disclosed in the declaration. For the foregoing reasons the rejection of claims 1-28 and 30-32 under 35 U.S.C. 103(a) is maintained.

2. The rejection of claim 29 under 35 U.S.C. 103(a) as being unpatentable over Sturla et al (US Patent Application 2001/0051135 A1, Published 12/13/2001) in view of Ashton et al (US Patent 6350433 B1, Published 02/26/2002) further in view of Carballada et al. (US Patent 6703008 B2, Published 03/09/2004) **is maintained**.

Applicant Claims

Applicant claims a aerosol device comprising a cosmetic composition comprising a polyurethane in a cosmetically acceptable medium comprising water and an organic solvent and a propellant comprising dimethyl ether and at least one C₃- C₅ hydrocarbons. The composition further comprises panthenol. Applicant further claims a method for shaping and/or holding a hairstyle and a hair lacquer using the aforementioned aerosol device.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

The teachings of Sturla et al. and Ashton et al. are disclosed above.

Ascertainment of the Difference Between Scope the Prior Art and the Claims

(MPEP §2141.012)

The combined teaches Sturla et al. and Ashton et al. lacks a teaching of a panthenol as additional vitamin. Carballada et al. cure the deficiency.

Carbadalla et al. teaches an aerosol hair spray composition comprising combinations of silicone-grafted copolymers. (See title). The hair spray optionally includes conditioning agents that would modify hair feel including vitamin B preferably panthenol. (See column 12, Lines 57-66).

***Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)***

It would have been obvious to one of ordinary skill in the art to combine Sturla et al. and Ashton et al. with Carballada et al. One would have been motivated to do because Sturla et al. teaches that a composition that can include a vitamin. One would be motivated to add panthenol because it would provide the hair spray of Sturla et al. with a conditioning agent that would give a better hair feel. For the foregoing reasons the instant device would have been obvious to one of ordinary skill in the art at the time of the instant invention.

Response to Applicant's Arguments

Applicant argues that there is no guidance to one of ordinary skill in the art to specifically include panthenol. Applicant's arguments have been fully considered but found not to be persuasive. Carbadalla et al. teach that aerosol hairsprays can optionally include panthenol in order to modify the feel of hair. For the foregoing reasons the rejection of claims 29 under 35 U.S.C. 103(a) is maintained.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Soroush whose telephone number is (571) 272-9925. The examiner can normally be reached on Monday through Thursday 8:30am to 5:00pm E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ali Soroush
Patent Examiner
Art Unit: 1616

/Johann R. Richter/

Supervisory Patent Examiner, Art Unit 1616